

WHAT IS CLAIMED IS:

1. A vulcanizable rubber composition comprising:
  - a) a rubber component selected from natural rubber, synthetic rubber, or combinations thereof;
  - b) a methylene donor; and
  - c) a methylene acceptor selected from the group consisting of substituted or unsubstituted 3-hydroxydiphenylamine.
2. The composition of Claim 1, wherein said methylene acceptor is incorporated into said rubber component in an amount from about 1 to 25 parts by weight based on 100 parts by weight of said rubber component.
3. The composition of Claim 2, wherein said methylene acceptor is incorporated into said rubber component in an amount from about 1 to 5 parts by weight based on 100 parts by weight of said rubber component.
4. The composition of Claim 1, wherein the weight ratio of methylene acceptor to methylene donor is between about 1:10 and 10:1.
5. The composition of Claim 1, wherein said methylene donor is selected from the group consisting of hexamethylenetetraamine, di-, tri-, tetra-, penta-, or hexa-N-methylol-melamine, hexamethoxymethylmelamine, oxazolidine and N-methyl-1,3,5-dioxazene.
6. The compound of Claim 5, wherein said methylene donor is hexamethylenetetraamine and the weight ratio of methylene acceptor to methylene donor is at least 2:1.
7. The composition of Claim 1, further including (d) a reinforcing material.
8. The composition of Claim 1, further comprising one or more additives selected from the group consisting of sulfur, carbon black, zinc oxide, silica, an antioxidant, a stearate, an accelerator, an oil and an adhesion promoter.
9. The compound of Claim 1, wherein the methylene acceptor is unsubstituted 3-hydroxydiphenylamine.

~~10.~~ A method for making a rubber composition comprising the steps of mixing:

- a) a rubber component selected from natural rubber, synthetic rubber, or combinations thereof;
- b) a methylene donor; and
- c) a methylene acceptor selected from the group consisting of substituted or unsubstituted 3-hydroxydiphenylamine.

11. The method of Claim 10, wherein said methylene acceptor is incorporated into said rubber component in an amount from about 1 to 25 parts by weight based on 100 parts by weight of said rubber component.

12. The method of Claim 11, wherein said methylene acceptor is incorporated into said rubber component in an amount from about 1 to 5 parts by weight based on 100 parts by weight of said rubber component.

13. The method of Claim 10, wherein the weight ratio of methylene acceptor to methylene donor is between about 1:10 and 10:1.

14. The method of Claim 10, wherein said methylene donor is selected from the group consisting of hexamethylenetetraamine, di-, tri-, tetra-, penta-, or hexa-N-methylolmelamine, hexamethoxymethylmelamine, oxazolidine and N-methyl-1,3,5-dioxazene.

15. The method of Claim 10, wherein said methylene acceptor is unsubstituted 3-hydroxydiphenylamine.